

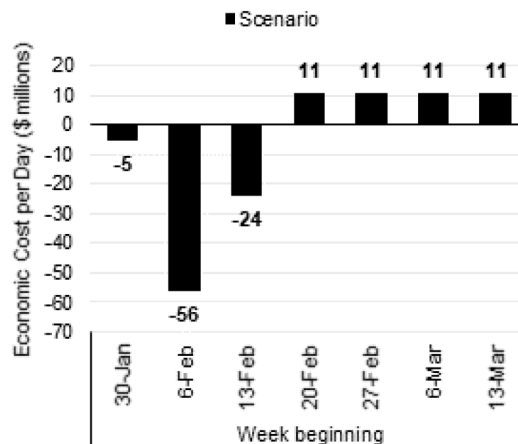
RE: Economic Impacts of Blockades at Border Crossings

From: "Lee, Frank" <frank.lee@fin.gc.ca>
To: "Capeluck, Evan" <evan.capeluck@fin.gc.ca>
Cc: "Torgunrud, Brian" <brian.torgunrud@fin.gc.ca>, "Bilodeau-Fortin, Geoffroy" <geoffroy.bilodeau-fortin@fin.gc.ca>
Date: Mon, 14 Feb 2022 18:12:17 +0000

OK Thanks

From: Capeluck, Evan <Evan.Capeluck@fin.gc.ca>
Sent: Monday, February 14, 2022 1:06 PM
To: Lee, Frank <Frank.Lee@fin.gc.ca>
Cc: Bilodeau-Fortin, Geoffroy <Geoffroy.Bilodeau-Fortin@fin.gc.ca>; Torgunrud, Brian <Brian.Torgunrud@fin.gc.ca>
Subject: RE: Economic Impacts of Blockades at Border Crossings

Yeah, I have the following profile: Coutts in week 1, Coutts + Ambassador in week 2, Coutts and Emerson in week 3. I assume the cost of Coutts is higher in weeks 2 and 3 (based on TC's email).



Regarding (3) the scale-up factor of 2, I'm not actually using it in the analysis. It was just to illustrate how we can get close to TC's scenario 1. However, it is close to what an IO model gives for a shock to manufacturing (total/direct effect ratio).

From: Lee, Frank <Frank.Lee@fin.gc.ca>
Sent: Monday, February 14, 2022 11:15 AM
To: Capeluck, Evan <Evan.Capeluck@fin.gc.ca>
Cc: Bilodeau-Fortin, Geoffroy <Geoffroy.Bilodeau-Fortin@fin.gc.ca>; Torgunrud, Brian <Brian.Torgunrud@fin.gc.ca>
Subject: RE: Economic Impacts of Blockades at Border Crossings

Hi Evan

Thanks for updating this. So all together (3 bridges), it is about \$60M/d?

Also (3) scale-up factor of 2 appears to be quite large. Where is this coming from?

Btw, based on what Brian T sent around, the auto sector seems to account for about 20% of trade (Detroit). Including other transportation and electric machinery, the share rises to 32%.

From: Capeluck, Evan <Evan.Capeluck@fin.gc.ca>
Sent: Monday, February 14, 2022 10:54 AM
To: Lee, Frank <Frank.Lee@fin.gc.ca>; Bilodeau-Fortin, Geoffroy <Geoffroy.Bilodeau-Fortin@fin.gc.ca>; Torgunrud, Brian <Brian.Torgunrud@fin.gc.ca>
Subject: RE: Economic Impacts of Blockades at Border Crossings

Happy Monday!

I'm guessing there will be a lot less pressure from above with the Ambassador Bridge reopened this morning.

Anyways, some reflections on the GDP impacts based on the below...

- Based on the descriptions of Scenarios 2 and 3, I'm not sure we should include these scenarios in our briefings for now, especially given that Ambassador is open again. If we were going to see a big escalation in closures, it probably would have been over the weekend.
- Based on the description below, Scenario 1 seems like a reasonable upper-bound for the daily cost of the Ambassador blockade. I could easily get a GDP impact of \$55M per day based on (1) daily trade at Ambassador of \$390M per day *times* (2) estimated 7% reduction in traffic after diversion *times* (3) scale-up factor of 2 to account for indirect/induced effects. Again, I think this should be seen as an upper-bound since it assumes the reduction in trade flows has one-for-one impact on production. That might be roughly true for automakers, but probably not for other affected sectors. The costs are also probably mostly transient with catch-up production expected the coming weeks.
- Given that the Coutts and Emerson blockades are ongoing, we should probably incorporate them into the GDP impacts, assuming they remain disrupted until later this week. Based on daily trade volumes (not perfect as discussed below), the daily impacts from Coutts and Emerson could be about 12% and 18% of Ambassador's, respectively.

Updating the GDP impacts to include (a) one week Ambassador blockade (at \$45.2M/day); (b) three week Coutts blockade (at \$5.4M/day in week 1, but growing in subsequent weeks) and (c) one week Emerson blockade (at \$8.1M/day) - *and* continuing to assuming half of the impacts are made up in the following four weeks - I get the following for an upper-bound:

Real GDP Impacts (shock minus control)						
Scenario	Level (%)			Growth (SAAR, p.p.)		
	2022Q1	2022Q2	2022	2022Q1	2022Q2	2022
	-0.05	0.00	-0.01	-0.21	0.22	-0.01

Growth Rates (%)		
	Baseline	Scenario
Feb-2022	0.7	0.4
Mar-2022	0.7	1.1

Apr-2022	0.5	0.4
2022Q1	1.2	1.0
2022Q2	6.5	6.8
2022	4.6	4.6

From: Dea, Christian <christian.dea@tc.gc.ca>

Sent: Friday, February 11, 2022 7:38 PM

To: Turcotte, Julie <Julie.Turcotte@fin.gc.ca>; Grenier, Mathieu <mathieu.grenier@tc.gc.ca>; Leore, Bob <bob.leore@tc.gc.ca>; Lapointe, Mario <mario.lapointe@tc.gc.ca>; Hristeva, Polina <polina.hristeva@tc.gc.ca>

Cc: Capeluck, Evan <Evan.Capeluck@fin.gc.ca>; Lee, Frank <Frank.Lee@fin.gc.ca>; Bilodeau-Fortin, Geoffroy <Geoffroy.Bilodeau-Fortin@fin.gc.ca>; Torgunrud, Brian <Brian.Torgunrud@fin.gc.ca>

Subject: RE: Economic Impacts of Blockades at Border Crossings

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Hi Julie,

Thanks for the follow up and your comments.

Two things:

1. You will find attached, for your information, our integrated document on the economic impacts of the blockade. We will send it to our DM and MINO over the week end.

Key highlights are :

- * The Ambassador Bridge is the busiest crossing along the Canada-U.S. border handling over around **\$390 million of trade/day** representing 26% of the country's exports and 33% imports by road. The bridge records more than 7,000 daily commercial vehicle crossings daily

- * It is estimated that the cost to the Canadian economy of a full shutdown of the bridge would likely be in the range of \$45M/day over the first week based on current mitigation efforts put in place by shippers and available alternative options. However, the impact could reach \$86M/day to \$161M/day (extreme case) in the event where other crossings become unavailable and the situation drags on in length.

- * The impact will be especially acute for manufacturers, but especially the auto sector given its high concentration in Southern Ontario, its high integration with the US, and the just-in-time nature of its business model. Automakers in Canada and the US, including Ford, Toyota and Honda, have already started scaling back or cancelling production.

- * From Monday to Thursday, February 7th-10th, the blockade at the Ambassador Bridge has diverted traffic away to nearby crossings, with Sarnia absorbing most of the excess traffic (100% increase) but also Fort Erie and Queeston (30% increase). The **current net cumulative weekly effect (-7%) is relatively small**. The rerouting of traffic however erodes the number of hours truckers are able to drive as per safety regulations and adds significant costs to the industry.

* This disruption adds to pandemic-related supply chain disruptions, such as the semiconductor shortages, truck labour shortage and the recent BC flooding.

2. Here are some answers to your comments/questions. Happy to discuss further

- What do you assume in terms of % of impacted shipments that are able to divert to other crossings (e.g., Sarnia/Niagara land crossings; rail; air)?

These estimates were made trying to capture the potential impact of a bridge closure. We are fully aware that our “high” scenario assumes a very large impact. Therefore, it should be interpreted as upper threshold. Our scenarios do not consider any diversions to other crossings.

- The estimates only capture the Ambassador Bridge blockage. Would it be reasonable to scale up the estimates based on total trade flows impacted at all border crossings (i.e., Ambassador + Coutts + Emerson)? Or would we expect different impacts (given different type of sectors impacted, some flowing through crossings, etc.)? Our estimates exclusively consider the Ambassador bridge blockade. In our model we shock commodities imported and exported via the bridge, using data from TC's trade database. The closure of other bridges would have a different impact on industries and sectors, according to the specific value of goods exported and imported. To grasp this, we would need to run a separate input for each bridge.

- What is the time horizon for the first-week impacts? Do they represent a full-week closure or a part-week closure (i.e. Feb 7 to 12)? Are they in nominal or real dollars?

The estimates are in nominal dollars. We estimated the daily impact of a bridge closure on GDP. No assumptions were made regarding the specific duration of the bridge closure, provided it lasts shorter than one week.

- What should we expect for week two if the blockade continues? By roughly how much could we expect impacts to increase?

To answer this question, we would have to re-run the model with the assumptions for week 2. The upper threshold (the “high” scenario) would not change. In the past we ran analysis for other disruptions, in which the impact for week 2 were up to 3.5 times higher than the impact during the first week. However, the methodology used cannot be exactly compared with the one used for the Ambassador Bridge, as we assumed an immediate impact on the automotive sector. Therefore, the increase during the second week can be expected to be less than the one obtained previously.

Have all a nice week end !

Christian

Christian Dea (il, he, him)

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Sent: Friday, February 11, 2022 1:27 PM

To: Dea, Christian <christian.dea@tc.gc.ca>; Grenier, Mathieu <mathieu.grenier@tc.gc.ca>; Leore, Bob <bob.leore@tc.gc.ca>; Lapointe, Mario <mario.lapointe@tc.gc.ca>

Cc: Capeluck, Evan <Evan.Capeluck@fin.gc.ca>; Lee, Frank <Frank.Lee@fin.gc.ca>; Bilodeau-Fortin, Geoffroy <Geoffroy.Bilodeau-Fortin@fin.gc.ca>; Torgunrud, Brian <Brian.Torgunrud@fin.gc.ca>

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Thanks Christian, much appreciated and very useful analysis – these scenarios will definitely help refine our GDP impact estimates.

At first glance, impacts seem large to us, especially scenarios 2-3, implying limited diversion options and high sensitivity to any delays.

I heard from our colleagues at ITF that “it appears GM is seeking to rent an ice-breaker and transport vehicles and parts via the Great Lakes, and has worked with CBSA to ensure clearance.” That’s creativity.

A few clarification questions from the team, if you can shed some light on these:

- What do you assume in terms of % of impacted shipments that are able to divert to other crossings (e.g., Sarnia/Niagara land crossings; rail; air)?
- The estimates only capture the Ambassador Bridge blockage. Would it be reasonable to scale up the estimates based on total trade flows impacted at all border crossings (i.e., Ambassador + Coutts + Emerson)? Or would we expect different impacts (given different type of sectors impacted, some flowing through crossings, etc.)?
- What is the time horizon for the first-week impacts? Do they represent a full-week closure or a part-week closure (i.e. Feb 7 to 12)? Are they in nominal or real dollars?
- What should we expect for week two if the blockade continues? By roughly how much could we expect impacts to increase?

We will share our assessment once refined.

Thanks again for your help, much appreciated,

Julie

Julie Turcotte

Director General | Directrice générale

Economic Analysis and Forecasting Division | Division de l'Analyse et Prévisions Économiques

Economic Policy Branch | Direction de la Politique économique

From: Dea, Christian <christian.dea@tc.gc.ca>
Sent: Thursday, February 10, 2022 6:05 PM
To: Turcotte, Julie <Julie.Turcotte@fin.gc.ca>
Cc: Torgunrud, Brian <Brian.Torgunrud@fin.gc.ca>; Lee, Frank <Frank.Lee@fin.gc.ca>; Capeluck, Evan <Evan.Capeluck@fin.gc.ca>; Bilodeau-Fortin, Geoffroy <Geoffroy.Bilodeau-Fortin@fin.gc.ca>; Hristeva, Polina <polina.hristeva@tc.gc.ca>; Grenier, Mathieu <mathieu.grenier@tc.gc.ca>; Leore, Bob <bob.leore@tc.gc.ca>; Lapointe, Mario <mario.lapointe@tc.gc.ca>
Subject: RE: Economic Impacts of Blockades at Border Crossings

PROTECTED A / PROTÉGÉ A

Bonjour Julie,

Merci de partager votre analyse preliminaire.

On termine de notre cote notre analyse de l'impact economique. On a estime 3 "trade shocks" (voir note preliminaire ci-jointe).

Key highlights are:

- **Trade shock 1** assumes that most industries, except for those in the automotive sector, are able to mitigate the impact of a closure to a considerable degree by relying on stored inputs over the coming days (\$45M per day of net economic lost).
- **Trade shock 2** assumes that the bridge closure forces the shutdown of a wider array of manufacturing industries due to the lack on input and inability to export (\$86M per day of net economic lost).
- **Trade shock 3** assumes that lost imports and exports lead to widespread shutdowns and production outages across the Canadian economy (about \$160M per day of net economic lost) .

Results suggest that the closure of the bridge will result in net losses to Canadian GDP ranging from **\$45 to \$160 million per day**.

We will continue to refine our estimates on three key elements : i) scope and the depth of sectors affected, ii) potential mitigation factors such as alternative modes/routes for delivery (preliminary analysis reveals very limited capacity) and iii) duration of the shock on the supply chain.

Je vais te faire parvenir quelques maps et un sommaire de notre analyse demain.

Bonne soiree !

Christian

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Chief Economist and DG of Transportation and Economic Analysis (TEA)

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Sent: Thursday, February 10, 2022 5:28 PM

To: Dea, Christian <christian.dea@tc.gc.ca>

Cc: Torgunrud, Brian <Brian.Torgunrud@fin.gc.ca>; Lee, Frank <Frank.Lee@fin.gc.ca>; Capeluck, Evan <Evan.Capeluck@fin.gc.ca>; Bilodeau-Fortin, Geoffroy <Geoffroy.Bilodeau-Fortin@fin.gc.ca>

Subject: Economic Impacts of Blockades at Border Crossings

Bonjour Christian,

Merci encore pour le backgrounder hier, très apprécié.

Voici notre note très préliminaire qui a été partagé avec le Sous-Ministre.

Comme tu peux voir ceci reste assez high-level à ce stade, et l'emphase a été mise sur les impacts potentiels « élevés » dans le cas de perturbations persistantes et des difficultés possibles de diversion du commerce. On regarde pour quantifier ceci évidemment. Laisse-moi savoir si c'est cohérent avec votre propre analyse, et si vous avez des intels plus précis. Notamment, quel est le potentiel de diversion possible vers d'autres modes de transports ou autres passages à la frontière?

Également, est-ce que vous auriez une liste des infrastructures de transport clés (en terme d'impacts économiques), et qui pourraient être à risque de perturbations?

Merci,

Julie

Julie Turcotte

Director General | Directrice générale

Economic Analysis and Forecasting Division | Division de l'Analyse et Prévisions Économiques

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